

ABSTRACT

Compositions comprising a herbicide wherein it is desired that the compound not be retained by the plant foliage, and a repellent adjuvant, wherein the repellent modifies the surface properties of the composition so that retention of the composition on foliage of a cultivated plant is reduced are described. In particular, the herbicide composition comprises a repellent adjuvant that is an aqueous solution of an alkyltrialkoxysilane such as methyltrimethoxysilane and a water soluble silane coupling agent such as N-(2-aminoethyl)-3-aminopropyltrimethoxysilane or an aqueous solution of an organosiliconate such as sodium methylsiliconate. Methods are described for using these compositions to prevent weeds without injury to cultivated plants, which plants include crop plants, food plants, turfgrass, ornamental plants, and garden plants.